

Defensin

Week 7

Summarized below are the experiments conducted this week in chronological order. Click on the experiment name to view it. To go back to this summary, click **Summary** in the footer.

Summary

1	Liquid Culture of pSB1C3-Def cells from iGEM HQ	2
2	Plasmid Extraction of pSB1C3-Def	3
3	PCR Amplification of pSB1C3-Def Plasmids	4

1 Liquid Culture of pSB1C3-Def cells from iGEM HQ

Responsible

Oscar He and Ellinor Lindholm

Results and Conclusions

Successful.

2 Plasmid Extraction of pSB1C3-Def

Responsible

Oscar He and Ellinor Lindholm

Protocols used

Plasmid Extraction

Modifications and comments to protocols

Plasmid Extraction - Step 1: centrifugation at 13,000 rpm ($\sim 17,000 \times g$)

Plasmid Extraction - Step 10: DNA elution using EB Buffer

Results and Conclusions

Successful.

3 PCR Amplification of pSB1C3-Def Plasmids

Responsible

Oscar He and Ellinor Lindholm

Protocols used

PCR Amplification (Q5)

Gel electrophoresis

Modifications and comments to protocols

PCR Amplification (Q5): 1 μ l DNA sample used in PCR mix.
PCR Amplification (Q5) primers: VF2_R (reverse)
VF2_F (forward)

Results and Conclusions

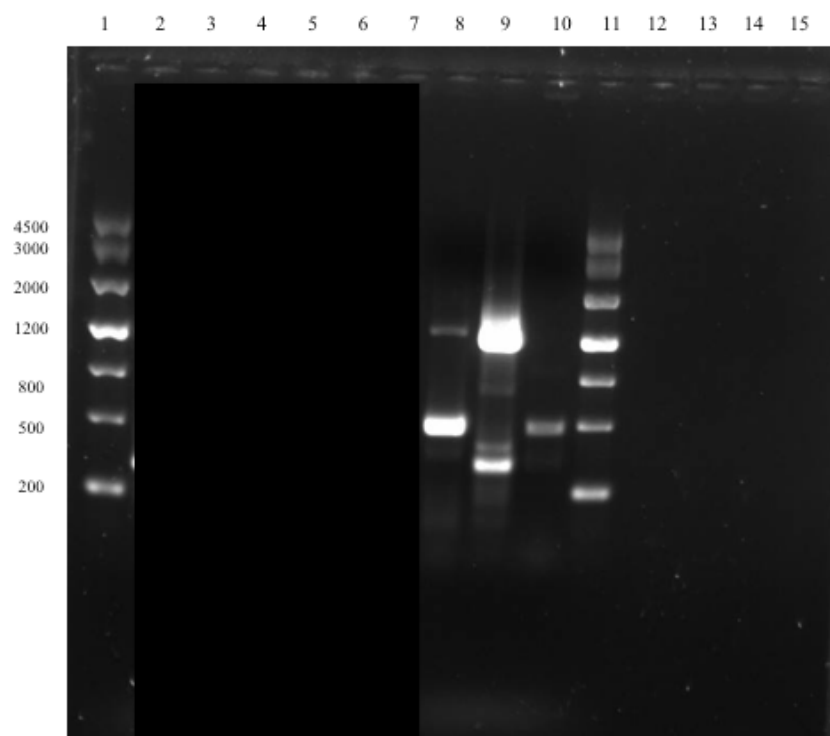


Figure 1: Result of the gel electrophoresis of PCR product, with 1 % agarose at 100 V. (1) DNA Ladder (8) Def (9) Positive control (10) Negative control (11) DNA Ladder. The wells hidden behind the black rectangle correspond to unrelated samples that were run on the same gel

Table 1: Concentration of PCR product measured with NanoDrop at 280 nm.

Sample	Concentration [ng/ μ l]
Def HQ	90.7

Band at expected size, successful PCR amplification.

Discussion and Troubleshooting

The PCR amplification was successful and the sample was used for further experiments.